

## ABSTRACT

A GPS receiver is mounted within a wireless handset in which the GPS receiver is spaced from a phone motherboard carrying a transmit section, with shielding interposed between the GPS receiver and the phone motherboard for suppressing radiation which interferes with the proper operation of the GPS receiver. The result is that the GPS receiver is not mounted to the phone motherboard but rather is spaced from one side thereof, with the receiver, in one embodiment, being placed in a shielded housing so as to form a Faraday cage around the GPS receiver. In order to further minimize interference between the radiation from the transmit section of the phone motherboard and the GPS receiver, a GPS antenna is utilized which has a two or three pole filter and a low noise amplifier tuned to reject the interfering radiation from the phone motherboard and in one embodiment is provided with a semi-rigid coaxial cable to prevent interfering radiation from entering the GPS receiver through the coaxial cable.